

INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 02/05746

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H05B41/288

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHEDMinimum documentation searched (classification system followed by classification symbols)
IPC 7 H05B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2001/020830 A1 (HUBER MARTIN ET AL) 13 September 2001 (2001-09-13) page 4, left-hand column, line 8 -page 4, right-hand column, line 48; figure 1 ---	1,8
E	WO 02 104083 A (MATSUSHITA ELECTRIC WORKS LTD) 27 December 2002 (2002-12-27) page 14, line 10 -page 21, line 4; figure 1 ---	1,8
A,P	US 6 380 694 B1 (UCHIHASHI KIYOAKI ET AL) 30 April 2002 (2002-04-30) column 3, line 59 -column 4, line 5 column 5, line 17 -column 5, line 67; figures 3A,3B --- -/--	1,8



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

1 April 2003

Date of mailing of the international search report

10/04/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Speiser, P

INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 02/05746

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 020 691 A (SUN YIYOUNG ET AL) 1 February 2000 (2000-02-01) column 4, line 23 -column 4, line 61 column 7, line 41 -column 9, line 60; figures 4,14A,14B -----	1,8
A	US 5 932 976 A (UCHIHASHI KIYOAKI ET AL) 3 August 1999 (1999-08-03) -----	
A	GB 2 319 677 A (MICRO TECH LTD) 27 May 1998 (1998-05-27) -----	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB 02/05746

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2001020830	A1	13-09-2001	DE 19916878 A1 AT 221715 T AU 747501 B2 AU 5517899 A BR 9913860 A DE 59902215 D1 WO 0018197 A1 EP 1114571 A1	30-03-2000 15-08-2002 16-05-2002 10-04-2000 12-06-2001 05-09-2002 30-03-2000 11-07-2001
WO 02104083	A	27-12-2002	US 2002190665 A1 WO 02104083 A2	19-12-2002 27-12-2002
US 6380694	B1	30-04-2002	JP 2002151286 A	24-05-2002
US 6020691	A	01-02-2000	NONE	
US 5932976	A	03-08-1999	CA 2224300 A1 JP 10284265 A	14-07-1998 23-10-1998
GB 2319677	A	27-05-1998	DE 69716290 D1 EP 0940063 A1 GB 2356499 A ,B WO 9823134 A1 US 6124682 A	14-11-2002 08-09-1999 23-05-2001 28-05-1998 26-09-2000